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ABSTRACT

The literature on vocational education (VE) in secondary schools was reviewed. The main conclusion of the review of international and Australian policy trends and directions in VE was that, to date, Australian attempts to create a more vocationally relevant curriculum have resulted in a system in which the academic curriculum has remained central and vocational options are offered in only a piecemeal manner. It was therefore recommended that policymakers decide whether to pursue VE as a new and inclusive component of the secondary school curriculum or to retain vocational options for less able students. It was further recommended that policymakers consider the following issues when deciding secondary VE's future: equity, certification, supply side economics, the relationship between general education and VE, school-workplace links, the value of part-time work experience to secondary school students, and differentiation of the levels of VE. A model for VE in Australian schools was proposed that outlined the goals, features, benefits, and limitations of VE for students during childhood, adolescence, young adulthood, and adulthood. Implications of the literature review for the following areas of school-level practice were identified: coordination, curriculum, assessment, professional development, students, resources, and evaluation. (A 120-item annotated bibliography is included.) (MN)

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VOCATIONAL EDUCATION IN SECONDARY SCHOOLS

A REVIEW OF THE LITERATURE

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Table of Contents

	ITEM	PAGE
	Introduction	4
	Part 1 - A Review of the Literature	5
1.1	Policy Trends and Directions	6
1.2	Issues for Consideration	9
1.3	A proposed model for vocational education in Australian Schools	10
1.4	Some Implications for School Level Practice	16
	Glossary	19
	Part 2 - A Select Annotated Bibliography	20
	Research	21
	Policy	24
	Models	32
	Issues	33
	Practice	36
	Equity	38

Introduction

This literature review is in two parts :

Part 1

An attempt has been made here to synthesize the literature under four broad headings:

- 1.1 Policy Trends and Directions in Vocational Education
- 1.2 Issues Arising from the Analysis of Policy Trends
- 1.3 A Proposed Model for Vocational Education in Australian Secondary Schools
- 1.4 Implications for School Level Practice

Part 2

Consists of a selected annotated bibliography of the literature that was reviewed.

It is hoped that the material contained in the two parts will provide some directions for those who have responsibility for implementing vocational education in secondary schools. In order to make it as useful as possible we have attempted to place vocational education in a broader context than envisioned by the present project. It seemed clear to us from the literature that Australian schools, unlike their counterparts in North America and Europe, lack a strong tradition of vocational education in schools. Since traditions cannot be created overnight, we have suggested a model that will help schools place vocational education in a context that is important to all students at all stages of their education. If nothing else, the model will created debate and discussion within the educational community. Hopefully, it might also lead to improved practice and outcomes for the students for whom we have responsibility.

Part 1

**A Synthesis of Policy Directions, Issues,
Models and Implications
for School Level Practice**

1.1 Policy Trends and Directions

International

Many industrialized nations are currently grappling with the issue of vocational education and training and its role in the education of 16-19 year olds. For some, vocational education is a well established track chosen by students either early or later in their school careers (eg Germany, Denmark, France, Finland). For others, a commitment to comprehensive secondary education has meant the development of vocational streams within the comprehensive high school (eg Sweden, England and Wales, Scotland, USA). The most pressing issues for all countries at the moment, especially in the light of increased participation rates in countries like England and Wales, Scotland and the Netherlands but also in countries like Germany, Sweden and Finland where participation rates have been historically high, is to ensure that vocational education is equally valued alongside traditional academic education. There are a number of approaches currently being used to achieve this objective.

Sweden.

- general education component of vocational streams has been increased.
- the number of vocational course options has been decreased.
- access to higher education has been enhanced for students taking vocational courses.

Finland.

- Curriculum collaboration between vocational and senior secondary schools has been encouraged.
- Students have been encouraged to take courses from both types of schools.
- Pathways to universities have been established for students from vocational schools.
- Vocational schools have been upgraded through regional amalgamations.

Scotland.

- Vocational modules are available to all students and it is possible to complete academic course that includes nationally certified vocational modules.
- The modules are available in both secondary schools and colleges of further education.

USA.

- Reforms are seeking to incorporate vocational education into all aspects of secondary school education.
- TECH PREP courses start in high school and are articulated with two year courses in community colleges resulting in the award of associate degrees, and curriculum to full degree courses.

There is little evidence as yet concerning the efficacy of these various reform efforts but the common features seem to be :

- 1 Breaking down the barriers between vocational and academic education so that elements of each are available to all students.
- 2 Broadening vocational education so that it focuses on more than a single occupation.
- 3 Providing pathways from vocational education to further education.

Some of the untested assumptions, about which there is some evidence to cause concern, are as follows:

- Are barriers broken down in reality when vocational courses are included alongside traditional studies in secondary schools?
- Are students able to apply so called generic vocational skills in specific occupations?
- Are alternate pathways to further education able to provide genuine opportunities for students who undertake vocational education courses in schools to transfer "up" to academic post-secondary education?

In Denmark, which in theory provides alternate pathways to higher education from two types of vocational upper secondary school and from gymnasias (academic high schools), only five per cent of school leavers entering University come from the vocational schools.

Australia

The Commonwealth made it clear as early as 1987 that skills formation would require a greater emphasis on technical proficiency than schools were currently delivering. The means of achieving this on the Commonwealth's part has been to provide support for a more common approach at a national level to curriculum for the lower secondary school and more emphasis on employment related knowledge and skills for the senior secondary school.

The task has been made more difficult in Australia since there has been an erosion of the tradition in vocational education since 1950. The introduction of comprehensive schools in the 1960s and the separation of state departments for schools and for TAFE was accompanied by strong support for a general liberal education. In the senior secondary school, this became cemented as a traditional academic curriculum dictated by the needs of university entrance. It has only been with the increase in senior secondary participation rates during the 1980s that much thought has been given to transforming the curriculum. Very often, the changes introduced have been seen as alternatives to the traditional academic curriculum and thus two tracks have been established : one leading to university entrance and a second, more vocationally oriented, and intended to lead either to employment or to advance standing in TAFE.

Preface

We would like to thank a number of people who have made the task of preparing this report much easier than it would have been without such help.

The Centre for Educational Research and Development at the University of Southern Queensland made available the services of Ms Penny Young. She conducted the electronic literature searches on national and international data bases and skillfully negotiated with library personnel in getting copies of articles in a timely fashion. Her assistance was invaluable.

The Dean's Office in the Faculty of Education made available the services of the Dean's Executive Secretary, Ms Sharon Geise. She negotiated with each of the team members to get their contributions and put together numerous draft copies. She was responsible for producing the final draft. Her negotiation skills, not to mention her word processing abilities, were crucial in the development of the final product.

We trust that education systems, accrediting authorities and schools find the report useful in structuring their vocational education programs.

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November 1993

Since the late 1970s the following vocationally oriented initiatives have become part of most school systems :

- 1 Work experience programs.
- 2 School industry links programs.
- 3 Funding of specific volitional education initiatives (transition education, PEP, AVC)
- 4 The development of cooperative programs with TAFE often under the umbrella of a common certificate
- 5 The integration of employment related competencies into existing curriculum.
- 6 Formal career education or "World of Work" curriculum

The breadth of these initiatives could provide a platform for a comprehensive approach to vocational education in schools. Normally, however, these initiatives are not coordinated at the school level and sometimes are seen as options. This practice suggests a lack of clear vision for vocational education but also the lack of an existing platform within secondary schools relating to vocational education. At the same time it indicates that the way is clear for reconceptualising the field based on the needs of students and society.

Conclusion

Social and cultural factors will dictate how Australia responds to new imperatives. Lacking a strong tradition of vocational education in secondary schools, Australian education systems are not in a position where they can seek change and reform in the existing system : rather they are in the position of having to create vocational education as a valued component of the secondary school curriculum. This will need to be done in the context of the comprehensive secondary school where general education has been entrenched since the fifties.

Attempts to create a more vocationally relevant curriculum since the late 1970s seem only to have created a system in which the academic curriculum has remained central while vocational options have been added in a piecemeal way. What is more, such options have usually been designed for less able academic students. The vocationally relevant curricula have come to be seen as the way to cater for the increasing number of young people staying on at school. Rarely has the argument been advanced, as it is currently in the United States and as practice seems to be dictating in Scotland, that vocational education is for all students. There are some exceptions such as Electronics courses adopted in the NSW curriculum but these units are marginal to the main developments.

Australian policy makers must now decide whether to pursue vocational education as a new and inclusive component of the secondary school curriculum or to retain vocational options for less able students. The latter represents current practice while the former seems to be in line with international trends.

1.2 Issues for Consideration

There are issues that will need to be considered if the policy issue outlined above is to be addressed.

Equity

Any vision for the future must be capable of being implemented for all students. Groups with special needs in relation to vocational education include students with disabilities and isolated students. The latter did not have access to the range of programs available in most urban settings and the former can benefit from a wide range of training opportunities if they are provided access to them.

Certification

Vocational education courses are usually certified by traditional secondary education authorities so that students exiting from secondary schools can have their studies recognised as part of their secondary education. Yet the National Framework on the recognition of Training (NFROT) provides an alternative certificate process that is now available to secondary schools. certification in itself does very little : certification that meets NFROT standards is able to provide pathways to further education and training.

This raises the issue of the role of universities and their influence on the secondary school curriculum. Young people need to be encouraged to consider pathways to employment and further education other than that provided by university entrance. Universities also need to consider the legitimacy of vocational education courses as a preparation for university study.

Supply Side Economics

There are strong arguments supported by empirical data that where training is not targeted on an area of labour market demand that the social benefits to students and the economic benefit to the nation will be minimized. This means that extensive work needs to be done to identify those areas of economic growth that are likely to generate employment opportunities in the future. Not to proceed in this way is to put at risk the real contribution that vocational education can make to the lives of individuals and to society.

General and Vocational Education

School education is meant to provide a general education for all students. Vocational education in secondary schools should therefore not imply a narrow education. Rather it implies a broad general education that accompanies

occupational education capable of developing skills and understandings that are valued in the labour market.

While the average per capita cost of secondary schooling is less than the average cost in TAFE, and both are less again than the average in Universities, it does not follow that vocational education in schools will cost less than in TAFE or Universities. In fact it is possible that it will cost more. There is already evidence in the Joint secondary school/TAFE programs of additional costs associated with "double counting" of teaching resources and transport of students between institutions. If vocational education in schools is to be expanded using existing resources then there may be staff training costs, capital costs and costs associated with the possible underutilisation of equipment.

School/Workplace Links

There remains a need to foster links between schools and workplaces. Many programs of vocational education will require work experience and all current policies point to the workplace being the most relevant location for developing skills. This may involve the development of relationships that view workplaces as resources and draw on employers as partners in the education of young people. While there is now much experience in this area, the need for the future is to develop programs that can develop skills to acceptable national standards and provide a pathway to further education and training.

Valuing the Part-Time Work Experience of Secondary School Students

Recent ABS figures indicate that 26% of students in schools aged over 15 years are in paid employment. Given the lack of a vocational education tradition in Australian secondary schools, this experience of students should be integrated into a coherent curriculum related to skills development and work education. Research is needed on the range of the experiences of work gained by these students.

Distinguishing Levels of Vocational Education

Given the various activities that often come under the heading of vocational education it would be useful to develop a conceptual model that distinguished between different levels of vocational education (eg between work experience, in an electronics factory, a trades course in electronics and a course in electronics engineering design). At the same time it would be helpful to sequence these activities at appropriate stages in student's career.

1.3 A proposed Model for Vocational Education in Australian Schools

1.3.1 Introduction

As part of this literature review, a model for vocational education has been developed. This model is an attempt to identify some of the key features of vocational education as they exist in the early 1990s, while simultaneously conceptualising them in a way that encompasses

current policy initiatives and emerging trends. It is a way of viewing 'what is' in a context of 'what could be', by means of a framework that reflects sequential, coherent and holistic perspectives.

An outline of the model is provided in Table 1. The vertical columns on the right-hand side of the table (ie. examples, goals, features, benefits and limitations) represent an analysis of contemporary vocational education practice. The horizontal rows represent four sequential phases of growth and development (ie. childhood, adolescence, young adulthood and adulthood). A significant feature of the model is the changing focus for vocational education that can be generated and maintained as young people reach new levels of physical, intellectual and social maturity.

1.3.2 Four Phases of Development

The concept of sequential phases of personal development linked to an evolutionary approach to vocational education provides a useful framework for review and development. It is certainly in line with current proposals that seek to change traditional patterns of structural rigidity associated with many schools, colleges and institutions. A recommendation from the Schools Council's final report on the Compulsory Years Project Five to Fifteen (1993), for example, was that the 'primary/secondary' description for the stages of schooling be relinquished in favour of a categorisation that reflected phases of individual development.

The **childhood** phase involves children from five to nine or ten years of age and coincides with the early years of schooling (Kindergarten through to Year 5. During this phase the focus for vocational education is on exposing children to people and activities that lie beyond the classroom and the home. The general aim is to establish links and connections with the community and to raise awareness of the world of work. For many teachers in the early years, visits to nearby work places (eg. the local bakery) or guest speakers (eg. the local police person) have long been an established part of learning and teaching practice. More recently, a number of school communities have introduced activities that engage parents, business people and community representatives actively in ways that stimulate and support children's learning. The significance of the early years in developing student attitudes and behaviours is well documented and many teachers have adopted affirmative action approaches designed to counter stereotypical images, perceptions and preferences among young children with regard to the world of work. As teachers in the early years of schooling have noted, many children come to school with relatively well-formed views with regard to issues such as: men's versus women's work; high versus low status work; as well as expectations regarding their own futures — both at school and beyond.

With the onset of **adolescence** comes significant physical, emotional, intellectual, psychological and social changes for students in the age range ten or eleven to fourteen or fifteen. The main emphasis for vocational education during the middle years of schooling (ie. Years 5/6 - 9/10) is on implementing a curriculum that is relevant and responsive to student needs. Essentially, the thrust is on providing an 'orientation' to the world of work through a range of practical experiences and experiential learning. Given that significant numbers of

young adolescents are already participating in part-time employment and that the choices regarding possible courses, careers and lifestyles are on their minds (and those of their parents), opportunities are often concerned with expanding student horizons and encouraging them to accept greater responsibility for their own learning and development. Contact and interaction with adults other than teachers (eg. through mentoring, work experience, community and action research projects) has proven to be not only an effective motivational strategy for young adolescents but also a means of increasing their personal and social skills.

In **young adulthood**, the focus for vocational education is on the construction of pathways that will lead to productive and fulfilling lives in the future. The final years of schooling (ie. Years 10/11 - 12/13) provide a setting within which older adolescents can construct approved courses from a diverse range of accredited modules, units and subjects. The convergence of vocational and general education should be most clearly in evidence for students aged 16-17 years, especially in terms of flexible entry and exit points. The concept of 'workplace learning', where students participate in some form of structured learning by means of a vocational placement, is becoming a more common feature of courses and programs in the final years of schooling. By the end of their formal schooling, these students need to be able to demonstrate that they have acquired a comprehensive range of general understandings and employment-related competencies, and that they possess the capacity for further training and development. It should be noted that in order for this age-group to have access to appropriate vocational education and training opportunities, high level collaboration and cooperation among major interest groups and providers is required.

Once students have reached the age of 17 or 18, and have completed their formal schooling they are deemed to have reached the status of **adulthood**. The focus is now on vocational training and formal preparation for paid employment. By this stage in their lives, these young people should be advancing along a pathway that is linked to an employment-related destination in the short or medium term. A variety of pathways has been developed including apprenticeships, traineeships, cadetships and internships which are designed to provide individuals and groups with the skills, knowledge and attitudes that will prepare them for employment in a specific occupational area or industry sector. Entry level training generally combines both on-the-job and off-the-job training with a view to producing a more highly skilled and productive workforce. The implementation of the Australian Vocational Certificate Training System, with its emphasis on training which is competency-based, work-based and outcome-based, will ensure that adults are better prepared not only to enter the workforce, but also to undertake higher levels of training with a commitment to life-long learning.

Table 1: A Model for Vocational Education from Childhood to Adulthood

PHASE	FOCUS	EXAMPLES	GOALS	FEATURES	BENEFITS	LIMITATIONS
Childhood Year Level: P - 5 Age: 5 - 10	Vocational Awareness 'Exposure to worlds beyond the classroom and the home'	- visits and excursions - guest speakers - intro. to technology 'adopt-a-class' 'twinning' - sponsorship	- establish links and connections with local community - raise awareness of the world of work	- high level of parental interest/involvement - focus on various aspects of work (eg. 'who, what, where, how and why?')	- prevention of stereotypical student views and choices - rapport established with people other than parents/teachers	limited only by the imagination of teachers, parents, students & local community reps.
Adolescence Year Level: 6 - 10 Age: 10/11- 14/15	Vocational Orientation 'Enrichment of the curriculum'	- work experience - work shadowing - work simulation - mentoring - mini-enterprises - student researchers - careers education - counselling	- actively engage students in meaningful activities - integrate 'key comps.' - expand student horizons through greater access to the world of work	- focus on 'relevance' - raft of activities often classified as 'school-industry links' - potential to build on parttime employment - outcomes recorded in student portfolio	- increased student motivation - students gain 'real world' experience - interaction with AOTs (non-teachers) - personal & social development (all)	- can be 'one-off' - may not be mainstreamed - fragmentation - quality assurance - structures & time (ie. flexibility required)
Young Adulthood Year Level: 11 - 12 Age: 16 - 17	Vocational Preparation 'Formulation of post-school pathways'	- courses (eg. 'HSC Pathways', 'VCE', 'E', 'Vocational pilots') - structured programs (eg TRAC, TVEI) - vocational subjects (eg. tourism, SBM, industry studies)	- formulate effective pathways/destination s - converge 'general' and 'vocational' approaches - demonstrate student performance in authentic contexts	- wide student choice - multi-tracking - flexible entry & exit - extension of time for completion of course - sharing of sites and facilities/equipment	- customisation of courses by students - formal accreditation and credit transfers - synergy between sectors & providers - greater potential for equity (eg. outcomes)	- preferred student destination may not always be reached - high and low status subjects can emerge - limited availability of placements - admin. complexity
Adulthood Year Levels: 13+ Age: >17	Vocational Training 'Training for paid employment'	Apprenticeship - Trade (eg. food, building, printing etc) Traineeship - Non-trade areas (eg. service, retail etc) Cadetship - Para-professional (eg. defence, commerce) Internship - Professional (eg. medical, legal)	Apprenticeship - provide vocationally-specific training for employment - CBT & RPL Traineeship - provide broadly-based training - assist youth to respond to changing technologies & employment patterns	- on-the-job training + technical education - minimum of 15 years - four years training - on-the-job and off-the-job training - school leavers <19 12 months (13 weeks minimum off-the-job training)	<i>linked directly to employment</i> <i>4 year indenture</i> <i>wage for apprentice</i> <i>access and equity (preference to those without Yr 12)</i> <i>provides a 'foothold' to increase prospects</i> <i>employer incentives</i>	- sensitive to changes in the economy (reduction in downturns) - no guarantee of employment - limited availability of appropriate work placements

1.3.3 Common Principles

Emerging from the literature and underpinning the conceptual model for vocational education is a set of common principles (see Table 2). The nine statements of belief are generic, applicable to each of the four phases outlined above as well as to contemporary practice cited as examples in Table 1. They could also serve as criteria by which the quality or effectiveness of vocational education might be measured.

The principles can be grouped under three broad headings. The first is **equity and social justice**, which is based on the proposition that all students have the right to participate in and derive significant outcomes from high quality vocational education. Traditionally, certain groups (eg. girls and young women, those with disabilities and the geographically isolated) have not been well represented in the full range of vocational education and training activities that have been offered. While significant efforts have been made to increase the participation of young people from various backgrounds and experiences (eg. girls and young women entering non-traditional occupations) there is still a long way to go.

The second is **teaching and learning**, and focuses on integrated approaches that result in worthwhile outcomes for all parties involved. The convergence of vocational and general education as well as work and learning has been advocated universally in the 1990s. If this convergence is to be achieved, then teachers in the early, middle and senior years of schooling together with trainers and adult educators need to work towards a shared vision that encompasses a commitment to 'life-long' and 'self-directed' learning for all. There is a particular need to ensure that learning experiences are connected to students' past experiences as well as their intended destinations.

The third is **structures and organisation** which emphasises the importance of flexibility and productive partnerships. Much has been written recently about the need for organisations to overcome the rigidity (eg. with regard to the use of time, facilities and other resources) that has tended to limit the potential for skill and knowledge enhancement in many individuals and groups. High level cooperation is required between sectors and providers to ensure that they share common goals and objectives and that resources are used to maximum effectiveness.

Table 2: A Selection of Principles for Vocational Education

Vocational Education should:

be **accessible** to all students

Factors such as intellectual or physical ability, socio-economic status, gender, geographical location or ethnicity should not restrict any student's participation in vocational education.

lead to worthwhile **outcomes** for all participants

At the completion of vocational education activities all participants should be able to demonstrate an enhanced level of competence in ways that reflect an inherent as well as an instrumental value.

be **resourced** adequately

Well-trained personnel with access to quality facilities and equipment should be engaged to guide and support young people in safe and challenging environments.

be **integrated** across each phase of an individual's development

There should be a convergence of general and vocational approaches to education rather than a separation of roles and functions which begins in childhood and extends through to adulthood.

be **connected** to both prior experiences and intended destinations

Activities, programs and courses should build on existing student understandings and competencies, while at the same time be explicitly linked with higher order education/training/employment opportunities.

incorporate **assessment** techniques that are fair, valid and reliable

Students, parents, teachers, employers and other interest groups should understand the purposes, outcomes and currency of competency-based and other forms of performance measures and records.

be developed within a **flexible** framework

Maximum structural and organisational flexibility should be maintained to enhance student learning and progression (eg. multiple entry and exit points, credit transfer and articulation arrangements).

be built on productive **partnerships** involving key sectors & providers

Education, training, industry and community groups should work cooperatively in ways that generate a mutually beneficial sharing of goals, expertise, resources and outcomes.

be subject to regular monitoring and **evaluation**

There should be an emphasis on quality assurance and continuous improvement through regular review and development activities focussed on outcomes and processes.

1.4 Some Implications for School Level Practice

When vocational education is conceptualised as a long-term process that extends from childhood to adulthood — as distinct from a particular option that is offered to a targeted group of senior secondary students — there are significant implications for a range of key players. Given the scope of this literature review, the **school community** will be the focus in this section, however, it needs to be recognised that many other sectors including business and industry; TAFE and higher education; research agencies and professional associations; and municipal/shire groups and community organisations also need to be considered.

For many practising teachers and school administrators, the integration of vocational education across the various phases of young people's development will pose a number of potential problems and difficulties. In cases where no established tradition of vocational education exists, for example, or where its status has been relatively low, individuals might well raise a number of fundamental questions, including:

- **Coordination:** Whose responsibility is it and where should it be implemented?
- **Curriculum:** What are its objectives and what level of priority does it have?
- **Assessment:** What should be assessed and reported, plus when and how?
- **Professional Development:** Who should teach it and what expertise is required?
- **Students:** What are their roles, rights and responsibilities?
- **Resources:** What kind of facilities and materials are required?
- **Evaluation:** What criteria should be used to measure its effectiveness?

One way of approaching these questions is to apply the set of common principles to the various phases of development identified in the preceding section. The aim of such an exercise is to identify not only the observable gaps, but also the strong points pertaining to vocational education. Essentially, it is a strategy for constructing an action plan designed to plug the gaps and build on the strengths. An illustration of the way in which this strategy might be pursued (eg. in a workshop or staff meeting) is shown in Table 3.

In the early years, for example, it may be that integrated teaching and learner-centred approaches are firmly established and that more attention needs to be placed on the formulation of whole-school policies that promote a common sense of purpose and direction for vocational education. In dealing with young adolescents, while a number of work experience and related programs have had very positive outcomes to date, greater emphasis could be placed usefully on making much stronger and more practical connections with employers of teenagers and other youth service providers (eg. health, welfare and sport).

In the final years of formal schooling, there are a number of encouraging developments regarding more flexible structures, however, there are still perceived shortfalls in relation to students who are dropping out or who are not well represented in contemporary programs and courses. For students who have left school and are engaged in entry-level training programs, there has been significant progress with regard to competency-based assessment and course articulation, however, there would appear to be room for improvement in the sharing of sites, facilities and resources.

This very brief consideration of some of the implications for school communities has been designed to highlight the need for a comprehensive approach to vocational education. If schools are to respond to the challenge of integrating vocational education and general education then significant change will be required. While schools have a major responsibility for bringing about this change it is unlikely that they will be able to achieve it on their own. Most people would agree that productive partnerships are the way of the future, however, vigilance will be required to ensure that each partner contributes in ways that are not only mutually beneficial, but that also lead in very practical ways to high quality learning outcomes for all young people.

Table 3: Applying Vocational Education Principles to Different Phases of Development: Some Implications for School Communities

	CHILDHOOD	ADOLESCENCE	YOUNG ADULTHOOD	ADULTHOOD
EQUITY AND SOCIAL JUSTICE Accessible Outcome-Based Adequately-Resourced	- establish the world of work as a theme, project or activity for all students - capitalise on parental interest and enthusiasm	- pay particular attention to 'at-risk' students (eg. truants) - work on key competency development - gain support of employers of teenage part-time workers	- ensure 'special needs' students participate (NB. both ends of ability spectrum) - provide opportunities to allow for student demonstrations of performance in 'real' contexts - promote 'work-based learning' in a broad range of settings - raise status of vocational ed.	<i>provide parity of esteem (eg. common credential)</i> <i>avoid reinforcing 'high' versus 'low' status courses through skewed resource allocations</i>
QUALITY TEACHING AND LEARNING Integrated Connected Adequately Assessed	provide in-service education for teachers — network within and between schools	- promote experiential learning and student participation - increase challenges and maintain high expectations - build on student part-time work experiences - utilise career education/plans - expand student portfolios and self assessment - develop 'learning how to learn'	- generate curriculum breadth and depth - expand competency-based assessment techniques - blend internal & external ass.	<i>generate open and flexible learning</i> <i>promote networking & exchanges (eg. other sectors/industries)</i> <i>apply NFROT and NTB standards</i>
EFFECTIVE STRUCTURE AND ORGANISATION Flexible Cooperative (partnerships) Continually Evaluated	- promote multi-age and mixed ability grouping to foster cooperation and teamwork - exercise care (eg. sponsorship) to ensure ethical and moral responsibility is maintained - develop a whole-school policy with criteria to measure performance and progress	work with other youth services (eg. health, welfare & sport)	- promote modular approaches - expand use of ed. technology - create 'ladders' and 'bridges'	- promote sharing of sites, facilities and resources - recognise prior learning - endeavour to establish assurances with regard to intended destinations - implement TQM principles - ensure ongoing monitoring — especially with regard to technological change

Glossary

ACTRAC	Australian Committee for Training Curriculum
ANTA	Australian National Training Authority
ASF	Australian Standards Framework
ATS	Australian Traineeship System
AVCTS	Australian Vocational Certificate Training System
AVCTS	Australian Vocational Certificate Training System
CBT	Competency Based Training
CSB	Competency Standards Body
DEET	Department of Employment, Education and Training
ESFC	Employment and Skills Formation Council (A Council of NBEET)
ITAB	Industry Training Advisory Body
MOVEET	Ministers of Vocational Education, Employment and Training
NBEET	National Board of Employment Education and Training
NFROT	National Framework for the Recognition of Training (August 1992)
NOOSR	National Office of Overseas Skills Recognition
NTB	National Training Board
RPL	Recognition of Prior Learning
TAFE	Technical and Further Education
VEETAC	Vocational Education, Employment and Training Advisory Committee

Part 2

Vocational Education in Secondary Schools

A Select Annotated Bibliography

RESEARCH

Ashenden, D (1990). The student workers: The extent, character, consequences and possibilities of part-time work by secondary students. DEET. AGPS, Canberra, 58p.

A report containing information about current patterns and trends together with suggestions for the future with regard to secondary students in part-time work in Australia.

The Australian Longitudinal Survey 1985-1988 - Dynamics of the Youth Labour Market (1990). Monograph Series No. 4 Department of Employment, Education and Training, AGPS, Canberra. 94p.

A report in which data reflecting the dynamic links between the background, education and training and employment of young people are presented and analysed.

Beare, H & Millikan, R (1988) Skilling the Australian community: Future for public education, Australian Teachers Federation & the Commission for the Future, 22p.

A report of a research project which sought the advice of those groups or sectors which employ, train or educate school-leavers, and also of those people who are the direct clients of schools. The skills asked for by each user groups are identified and the implications for schools and the business sector discussed.

Business Council of Report on Education. (1986) Prepared by K Sinclair, University of Sydney, BCA, 30p.

A report in which the views of a sample of business people from member companies are collated and analysed. Concerns about the written communication skills, business knowledge and understanding of work sought by recruits direct from school are raised.

Chapman, G and Smallwood, J (1992) Student Perceptions of TAFE, NCVER, Adelaide.

A study of school students' views of TAFE as a post-school option.

Hill, D et al (1987) Is McDonalds a better place to work than school? Independent Education. Vol 17 No 1, p11-14.

In this article the authors report on their investigation of the perceptions of students working at McDonalds and find that many aspects of students' lives improved as a result of their work.

Howieson, C (1990) Beyond the gate: Work experience and part-time work among secondary school pupils in Scotland, British Journal of Education and Work, Vol 3, No. 3, p 49-62.

McRae D ed. (1989) Students at work: School students in part-time employment. Curriculum Development Centre, Canberra, 18p.

A report of a research project focussed on a group of Year 11 students in part-time employment in South Australia.

Ministerial Review of Work Experience, (1988). Ministry of Education, Victoria, 80p, Ministry of Education. Victoria, 80p.

A report of the first major evaluation of the work experience program in Victoria since its inception in the late 1960s.

Nolan, K & Hagen R (1989) School and work: A report into the employment experiences of school students at two Melbourne high schools. Job Watch, Carlton, 51p. A report of a research project examining the part-time employment of high school students.

The report concludes that the majority of students undertake their first paid employment while still at school, but know little about the mechanisms which exist for the protection of workers.

Ray, C.A. & Mickelson, R.A. (1993). Restructuring Students for Restructured Work: The Economy, School Reform, and Non-college-bound Youths, Sociology of Education. Vol 66, January, 1-20.

This article contends that the fundamental changes in wages, jobs, and future opportunities in the labour market since 1980 have had negative effects on non-college bound students' school outcomes and motivation and discipline as new workers and that the literature and the author's case study suggest that these economic changes have played a major role in shaping the current 'educational crisis'.

Schools and Business: A new Partnership, (1992). Centre for Educational Research and Innovation, OECD, Paris, 109p.

A report which focuses on links between schools and businesses. It claims to be the first major attempt to survey links at the international level.

Sultana, R (1990). Schooling for Work in New Zealand: Reproduction, contestation and transformation in three high schools, British Journal of Education and Work. Vol 3, No. 3 p 35-48.

This study records messages given to students about work within three high schools in New Zealand. Attention was given to overt and covert messages, and to those messages embedded within the structure of schooling itself.

Workplace Learning in NSW Senior Secondary Courses. (1993). Produced by Barbara Lepani and John Currie, Australian Centre for Innovation and International Competitiveness at the University of Sydney, Sydney.

POLICY

1 Vocational Orientation of Secondary Education

Australia Reconstructed. ACTU/TDC Mission to Western Europe, AGPS, Canberra, 1987.

Seen as a seminal document which influenced the development of the current national training agenda.

Aring, M.K. (1993). What the "V" Word is Costing America's Economy. Phi Delta Kappan 396-404.

Traces the history of vocational education in the US and argues the need to redefine it so that it can meet current needs.

Bengtsson, J. (1993). Labour Markets of the Future: the challenge to education policy makers. European Journal of Education 28(2), 135-157.

Argues the need for coherent education and training policies that will promote lifelong and recurrent learning.

Catts, R. Linking business with Education. Paper presented at 1992 AARE/NZARE Joint Conference, November, 1992.

The Australian Vocational Certificate Training System (1992) Employment and Skills Formation Council, NBEET, Canberra, 184p.

A report in which a new entry level training system for Australia is proposed.

Carnegie, J. Education & Training A Lifelong Concept. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Campbell, D (1991) Vocational education: Paper for the Industry Education Forum, seminar 8-9 August, 23p.

A paper in which the need to reform vocational education in Australia and to transfer the principles of the National Industry Education Forum (NIEF) into action is advanced.

Clare, R and Johnston, K (1993) Education and Training in the 1990s. EPAC, Canberra, 110p.

A paper in which the following topics are presented: an overview of the current education and training system; the rationale for government's role in education and training; assessment of the system's outcomes; and a review of mechanisms for improving overall assessment.

Cumming, J (Ed). (1992) Assessing and Reporting Student Competencies for Education, Training and Work: Directions for the 1990s. Australian Curriculum Studies Association, Canberra, 46p.

A report in which the outcomes of a national forum on assessment and reporting for education, training and work conducted in 1992 are documented.

Davis, D (1988) School to Work: The EHW Factor. Nelson.

Analyses school to work transition policy in th context of the need to coordinate the contribution of (E) education, the (H) household and (W) work relations.

Declaration of goals for Australia's schools.(1991) Industry Education Forum, Canberra, 4p.

A set of six key goals for the year 2000 focussed on schools which have been developed as a result of the NIEF's desire to work with all stakeholders to assist with the development of the best possible education system.

Del Valle, C. (1993). From High Schools to High Skills. The Workplace. Business Week/April 26, 1993 110-112.

Briefly describes a new initiatives of the Clinton administration in which the last years of school and the first years of work are integrated.

Dronkers, J.(1993). The Precarious Balance between General and Vocational Education in the Netherlands. European Journal of Education. 28(2), 197-207.

Compares the relative advantages of general and vocational education in the Netherlands and highlights the important role of dedicated vocational education and training institutions.

Education and Training Policy 1991. (1991) Australian Chamber of Manufactures, 16p.

A statement comprising broad objectives for education and training and a range of policies and initiatives.

Essential Features of Australia's Training System (1992) DEET on behalf of VEETAC, 154p. AGPS, Canberra.

A publication in which details of apprenticeship and the Traineeship system are presented and current policy directions in vocational education and training are discussed.

Grubb, W.N.(1992). Giving High Schools an Occupational Focus. Educational Leadership. 49(6), 36-43.

Examines three different approaches to integrating academic and vocational education in the US: the development of schools within schools, occupational high schools and the use of occupational clusters as administrative units.

House of Reps Standing Committee on Employment, Education and Training. (1991). Skills Training for the 21st Century. AGPS.

Criticises the apprenticeship system and the perceived lack of flexibility of TAFE and supports an integrated approach between schools.

Howieson, C. (1993). Parity of Academic and Vocational Awards: the experience of modularisation in Scotland. European Journal of Education. 28(2), 177-187.

Describes the Scottish modular system of vocational awards that allow students to take academic and vocational modules within the same system.

HSC Pathways: Implementation Guidelines (1993) Board of Studies NSW, 16p.

This document provides advice to schools on the implementation of the HSC Pathways provision from Year 11, 1994.

Information Paper: Current and Future Trends in Victorian Post-Compulsory Education and Training. (1992) Taskforce on Pathways in Education and Training, Department of School Education, Victoria, 51p.

The paper looks at trends in Victorian post-compulsory education and training, with an emphasis on vocational education and training. Following an overview of recent trends, the paper turns to three scenarios outlining the possible shape of Victoria's post-compulsory education and training system by 2001.

Lepani, B and Curry J. (1993). Workplace Learning in NSW Secondary Courses. Aust Centre for Innovation and Competitiveness, Dusseldorf Skills Forum.

Describes existing provisions and recommends policy.

National Competency Standards: Policy and Guidelines (1991) National Training Board, 36p. Canberra.

A document in which a system for developing and endorsing competency standards for occupations and industries on a national basis is outlined.

Report of the Overseas Mission to Study Developments in Vocational Education and Training. (1990) Commonwealth/State Training Advisory Committee (COSTAC), 67p. AGPS, Canberra.

A report containing a series of recommendations on vocational education and training for Australia.

Report of VEETAC Working Party on Recognition of Training. (1991) 20p.

This report has been developed by a Working Party of VEETAC and proposed a system for national consistency in the recognition of accredited courses, training programs, training providers, and competencies held by individuals.

Framework for the Implementation of a Competency-Based Vocational Education and Training System. (1993), Vocational Education, Employment and Training Advisory Committee (VTAC).

Key Competencies (1992) Report of the Committee to advise the AEC and MOVEET on employment-related key competencies for postcompulsory education and training, ACE and MOVETT 140p.

A report in which a set of key competencies considered essential for all young Australians are identified and a means of describing them are presented.

Key Competencies Industry Validation Project: Stage 1 Report (May 1993) Australian Centre for Best Practice, 47p. A report prepared for DEET following consultations with a range of industry representatives to establish whether the Mayer competencies are appropriate and relevant to industry requirements.

Kuntz, P. (1989). Vocational School Assistance Boosted by Senate Panel. Congressional Quarterly Weekly Report. October, 1989-2988.

Outlines support provided by US Senate for Vocational Education.

Lankard, B.A. (1992). Integrating Academic and Vocational Education: Strategies for Implementation. ERIC Digest, No. 120.

Refers to Carl D. Perkins legislation in the US requiring vocational and general education to be conducted together under a special funding program.

Lauglo, J (1992). Vocational Training and the Bankers' Faith in the Private Sector. Comparative Education Review. 36(2), 227-236.

Analyses the World Bank's policy on vocational education and training in which general education and private sector training are given precedence.

Naylor, M (1987). Articulation between Secondary or Postsecondary Vocational Education Programs and Proprietary Schools. Overview. ERIC Digest No. 64.

Argues the necessity for links between general and vocational education.

Naylor, M. (1986). Granting Academic Credit for Vocational Education. Overview. ERIC Digest. No. 57.

Argues the need for academic credit to be granted for vocational education courses.

Peck, J. (1991). The Politics of Training in Britain: Contradictions in the TEC Initiative. Capital & Class. Iss:44. 23-34.

Describes the establishment of Training and Enterprise Councils in Great Britain and identifies problems that might prevent them from achieving their goals.

Review of Post-Compulsory Education and Training (The Finn Report) Summary. Australian Vice-Chancellors' Committee. 12pp. 1991.

Outlines the AVCC response to Finn including a proposal to offer a joint TAFE/University two year module as a pathway to higher education in TAFE.

Rosenstock, L. (1991). The Walls Come Down: The Overdue Reunification of Vocational and Academic Education. Phi Delta Kappan. 72(6), 434-436.

Argues that current reforming to vocational education in the US have the potential to restructure secondary educators.

Rosenstock, L. (1991). Reunifying Academics and Vocational Education. Education Digest. 56(9), 22-25.

Reports on the rationale and objectives of US legislation (Carl D Perkins Vocational and Applied Technology Education Act) designed to bring about an integration of academic and vocational education.

Ruby, A. From School to Work: Employment-related Key Competencies. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Saunders, M and Halpin, D (1990). The TVEI and the National Curriculum. British Journal of Educational Studies. (1990). 224-236.

Points out that national curriculum and assessment policies in the UK are in many ways minimal to the vocational courses that grew up under the Technical and Vocational Education Initiative. Much the same could be said about the Australian situation in which the eight national curriculum areas reflect very much an academic curriculum orientation.

Upper Secondary Education in Scotland. (1992) Report of the Committee to Review Curriculum and Examinations in the Fifth and Sixth Years of Secondary Education in Scotland (The Howie Report), The Scottish Education Department, Edinburgh, 160p.

What Work Requires of Schools. (1991) The Secretary's Commission on Achieving Necessary Skills (SCANS), US Department of Labour, Washington DC 31p.

A report prepared in response to a request for advice on the level of skills required to enter employment and acceptable levels of proficiency for them.

Whiteside, T and Zhang, M (1992) Recent developments in technical and vocational education in the Chinese Senior Secondary System in The Vocational Aspect of Education. Vol 44, No. 3.

An article in which the structure of Chinese senior secondary education and recent moves to restore balance to the system by the introduction of more technical and vocational elements.

Wirt, J.G. (1991). A New Federal Law on Vocational Education: Will Reform Follow? Phi Delta Kappan. 72(6), 424-433.

Describes the objectives of a new Federal law in the US designed to bring about the integration of vocational and general education.

Young, M. (1993). Bridging the Academic/Vocational Divide: two Nordic case studies. European Journal of Education. 28(2), 209-214.

Highlights two approaches: the Swedish that is seeking to insert more general education into vocational education and the Finnish that is seeking more opportunities.

Young people's participation in post-compulsory education and training. (1991). Report of the Australian Education Council Review Committee, 224p.

A report in which the importance of vocational education is re-emphasised and the increasing convergence with general education is recognised. New national targets for post-compulsory education and training are recommended and key competencies identified.

Zuckman, J (1990). Vocational Education - Measure. Congressional Quarterly Weekly Report. Vol 48 Dec 29, 1991, pp 4241-4243. Describes the Carl DeLorkins Vocational and Applied Technology Education Act that provided \$US 1.6 billion in fiscal year 1991 for programs designed to serve students unlikely to pursue a traditional college education.

2 Resources

Bishop, J. (1989). Occupational Training in High School: When Does It Pay Off? Economics of Education Review, 8(1) 1-15.

Occupationally specific education pay off for students if they secure jobs related to the areas in which they have been trained less than half of vocational education students end up working in their training related area.

C.De Moura Castro and A Cabral de Androde (1990). Supply and demand Mis matches in training: Can anything be done? International Labour Review, 129(3), 349-369.

This paper argues that training must be adjusted to specific labour market demands if it is to meet economic equity objectives.

Daly, A. (1991). Are Education and On-The-Job Training Complementary or Substitute Activities? Evidence from Australia, Great Britain and the United States. Discussion Paper No. 260. The Australian National University, Centre for Economic Policy Research.

Provides data that suggests formal education and on-the-job training are to some extent substitute methods for skills formation.

Neuman S and Ziderman A. (1990). Vocational Schooling, Occupational Matching and Labour Market Earnings in Israel. Journal of Human Resources, 26(2), 256-281.

Provides data indicating that where vocational, education and labour market placement are matched there are medium to long term benefits for the participants.

Sweet, R (1991) The youth labour market: The current recession in the context of longer term trends and future options, Dusseldorp Skills Forum, 18p.

A contemporary view of the youth labour market in an historical context.

Ziderman A, (1989). Training Alternatives for youth: Results from Longitudinal data. Comparative Education Review, 33(2), 243-255.

Provides data based on a seven year study to indicate that there were no significant differences in the earning capacities of graduates from three different training modes: vocational schools, factory based apprenticeships and a year long ministry of labour teenage course. The most expensive training model, vocational schools, offered no earning advantages. The point is also made that non formal training modes do not offer one of the main advantage of the vocational schools, in broad general education.

3 Vocational Schools

Ayalon, H. The social impact of non-regular education in Israel. Comparative Education Review. 34(3) 302-313.

Provides data indicating that Israel's vocational education schools is dominated by ethnically disadvantaged groups and that these groups are over represented among high school dropouts. Yet second-change education provided through external high schools still tends to favor elite rather than disadvantaged groups.

MODELS

Bailey, T and Merritt, D (1993) The School-toWork Transition and Youth Apprenticeship: Lessons from the US Experience. Manpower Demonstration Research Corporation, New York, 74p.

A research report that assesses the feasibility of the youth apprenticeship model in the US by examining US programs that include some components of the model.

Crawford, I and Williamson, J (1993) Progress or Promise. Transition from School to the World of Work: Initiatives Adopted by the Government of Western Australia, Youth Studies Australia, Vol 12 No 2, 51-54.

In this article initiatives taken by the government of Western Australia to facilitate the transition of students from school to the world of work are reviewed and the reaction of members of the community to one initiative - competency-based training - in the state's secondary schools is discussed.

Keating, J (1992) Towards an Integrated Approach to Education and Training at the Postcompulsory Level. Seminar Paper No 16, IARTV, Melbourne.

A paper in which it is argued that there is a need to focus on schools and to bring the two cultures of education and training closer together.

Keating, J (1993) Education for 16-18 Year Olds: Some Reflections from Europe, 44p. (draft of a paper to be published by the Schools Council, NBEET, Canberra).

A paper in which current developments in education and training in Western Europe are discussed.

Sweet, R (1993) Learning in the workplace: A policy perspective, Paper presented at the NSW Department of School Education Conference on Work Placements and the Senior Years of Schooling. Dusseldorp Skills Forum, 9p.

A paper in which models of work place learning are discussed and policy directions considered.

Sweet, R (1992) Creating Partnerships between School, Work and Further Education. Dusseldorp Skills Forum, 14p.

A report on a three year project to develop a new national model of vocational preparation for Australia's youth.

Ministry of Education, New Zealand. (1993). Working Together: Building Partnerships between Schools and Enterprises. Wellington, 24p.

A guide that aims to help schools and enterprises to work together to enrich students' learning.

ISSUES

Boomer, G (1991) "Who Skilled Cock-Robin?"

A paper drawing distinctions between training needs and educational processes.

Competency-Based Assessment Report, (1993). National Assessment Research Forum, CBT Working Party, Assessment Steering Group, 61p. Product of a CBT Pilot Project funded by DEET.

This report forms part of a major national project commissioned by the Advisory Committee to the Ministers of Vocational Education and Training (VEETAC). It tackles the critical issues in competency-based assessment.

Cumming, J (1992). Beyond the two cultures: Creating a new paradigm for school-industry links, Youth Studies Australia Vol 11, No. 3, p 46-50.

A paper in which it is argued that rather than 'connecting' education and industry, the challenge is to create a new culture by developing knowledge and practical approaches from the basis of shared understandings and genuine cooperative effort.

Eltis, K. The Finn edge of the wedge for Schools - (to be advised)

Hill, P (1993) Post-compulsory education and training: Where to from here? In Curriculum Perspectives. Vol 13, No 3, p 70-72.

Introduces a series of papers on the changing needs of post-compulsory education.

International Partnerships Conference Report (1993). The International Partnership Network, University of Warwick, UK, 60p.

This report is designed to draw together ideas and experiences gained in building education business partnerships, compacts and coalitions in twenty countries.

It draws on evidence from a series of International conferences and reports and particularly the first International Partnership Conference held in England in June 1992.

Navaratnam, K K and O'Connor, R (1993). Quality Assurance in Vocational Education: Meeting the Needs of the Nineties, The Vocational Aspect of Education, Vol 45, No 2, 113-122.

This paper emphasises the need for a continuous management commitment for the successful implementation of quality assurance in vocational education.

Porter, P et al (1992), Competencies for a clever country: Building a house of cards? Unicorn. Vol 18 No. 3 p 50-58.

Questions competency based approaches to training as the only solution to current problems.

Price, B (1991) School-Industry Links. The consequences of meeting other people's business. ACER, Melbourne, 94p.

A comprehensive examination of school-industry links together with a discuss of the benefits of increased interaction for students, teachers, employers, unionists and parents.

Ramsay, G (1993). 'Changes in Vocational Education and Training', in Educational Imperatives: Never Mind the Width Feel the Quality, Papers presented at the 32nd National Conference of the Australian College of Education, Darwin 1992, ACE, Canberra.

A paper in which it is argued that there is a need to come up with a new model of education and training for young people that will make them a part of a post-industrial technological world.

Ray, C. & Mickelson, R. Corporate Leaders, Resistant Youth, and School Reform in Sunbelt City: The Political Economy of Education. Social Problems. Vol 37, No. 2. May, 1990.

Based on a case study on a particular US School/Industry partnership, the paper highlights conflicting conceptions of the problems facing labour market restructuring.

Roditi, H.F. (1992). High Schools for Docile Workers. The Nation. 16 March. 340-343.

Agrees that many work education programs discourage independence and creativity.

Saunders, L (1993). The work-related curriculum: The new entitlement? British Journal of Education and Work. Vol 6 No. 1, p75-89.

In this article is it argued that if the principle of 'entitlement' is not built into work-related provision, its key messaged - on relevance and incentives-are likely to be unrealised. That work-related curriculum needs to be developed through partnership between education and industry is now almost a truism; but partnership is harder to achieve than to eulogize.

Saunders, M and Halpin, D. (1990). The TVEI and the National Curriculum: A Cautionary Note. British Journal of Educational Studies. Vol 38 No. 3. pp224-237.

Sweet, R (1993). Has anything happened to general education? Paper presented at the NSW Chapter Convention of the Australian College of Education, Dusseldorp Skills Forum, 13p.

A paper in which it is argued that Australia's schools have been slow to listen to the enduring theme in recent Australian educational research that young peoples desire for a curriculum that makes better connections to working life after school, not just to university study.

Sweet, R (1992) Can Finn deliver vocational competence? Unicorn Vol 18 No. 1 p 31-43.

Questions the efficacy of a vocationally oriented secondary education to provide specific vocational skills.

Turner, D (1988) It means a lot more than business: Young people and enterprise skills, Bulletin of the National Clearinghouse for Youth Studies. 7 (2) pp2-6.

This article examines the meaning and application of enterprise skills development to the education and training of young people. A number of reasons are put forward as to why enterprise development should be promoted to young Australians by secondary schools and training agencies.

PRACTICE

Arkansas River Education Service Co-operative (1990). Co-Op Based Integrated Basic Skills Program. ERIC Document. 334-439.

Describes a project that developed an integrated basic skills instructional program to service grades 7-12 vocational students in 13 rural school districts in Arkansas. The program was based on a vocational assessment process. The project was then refocussed on average students in grades 7-12 across 5 different schools district. This involved restructuring the vocational education curriculum to include hands on as well as college preparatory course.

Beck, R.H., Copa, G.H. Pease, V.H. (1991). Vocational and Academic Teachers Work Together. Educational Leadership. 49(2), 29-31.

Provides practical examples showing how vocational and general education are being integrated in classrooms.

Business alive: Teacher Consultant Manual, (1991) Prepared by Norris C and Wakelin King W. Young Achievement Australia.

Material to support a program designed to provide junior secondary school students with a practical introduction to the Australian business system as a supplement to formal commerce studies.

Case Studies of Best Practice in Education Business Partnerships. (1993) New South Wales Department of School Education, Sydney, 70p.

A report in which fifteen case studies presented at a Statewide Best Practices Forum are documented.

Case Studies: School/Industry Links in South Australia. (1988) Prepared by Jennifer Neszpor, Department of State Development and Technology, 61p.

A series of nine case studies of school-industry links in South Australia.

Connections Interim Report: Best Practice in Industry-School Links. (1992) A Commonwealth Project of National Significance. Curriculum Corporation, 302p.

A report documenting the outcomes of a DEET-funded project conducted by the National Industry Education Forum. Contains models for past practice and lessons for schools seeking to develop school industry partnerships.

Cumming, J (Ed) (1993) Productive Learning Partnerships. Promoting Best Practice in Learning Partnerships between the Education and Training Sectors and the Building and Construction Industry, Work Skill Australia Foundations, 180.

A report in which the outcomes of a two-day workshop concerned with a range of "learning partnerships" are documented.

Cumming, J (1992) Resourceful Communities. Australian Curriculum Studies Association, Canberra, 90p.

A book about establishing 'community-based partnerships between education, business and other groups in rural Australia. While a major focus of the book is on best practice, the impact of current theories, concepts and recommendation (e.g. Finn, Mayer and Carmichael) is also considered.

Klineberg, K. AVC Pilot Projects. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Matijevic, B. Training for the Part-time and Casual Worker. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Mulqueeny, J (1990) What Works: Improving School/Tafe Links. Curriculum Corporation, Melbourne, 170p.

A practical guide to successful strategies on strengthening the links between the school and technical education sectors.

National Audit of Vocational and Career/Work Education Materials for the National Element of the Country Areas Program for Country Secondary Schools, (1993) Department of Education, Qld. 102p.

TRAC Training for retailing and commerce: A competency based links between school, work and further education. (1991)Dusseldorp Skills Forum, 14p.

An updated report in which the key features of a pilot program designed to improve young people's transition from school to full-time employment in the retail, commercial and service industries in the Newcastle area are discussed.

TRAC Training for retailing and commerce: A progress report. (1989) Dusseldorp Skills Forum, 10p.

A report in which the key features of a pilot program designed to improve young people's transition from school to full-time employment in the retail, commercial and service industries in the Newcastle area are discussed.

Tuisk, S. AVC Pilot Projects. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Zylinski, L, Maher, A, Burton P and Phillips K. (1991). School Industry Partnerships: The Wesley-CRA Model. Melbourne: Incorporated Association of Registered Teachers of Victoria.

Provides a working model for school-industry partnerships based on two years of practical experience.

EQUITY

Barker, L & Currie, J.(1988). The Provision of Post-School Education and Training and Labour Market Programs for Non-English Speaking People. A Policy Options Paper. Office of Multicultural Affairs. 58pp.

Examines special issues related to the post-schooling training needs of NESB students.

Brody-Hasazi, S, Salembier, G., Finck, K. (1983). Vocational Preparation for Secondary Mildly Handicapped Students. Teaching Exceptional Children. 206-209.

Provides a preparation and placement program for post-secondary handicapped individuals.

Brolin, D. Refocussing special education for career development. The Journal for Special Educators. 19(4), 55-60.

Describes problems facing many exceptional students in gaining employment and highlights the role career education can play in facilitating the transition process.

Bryce, Q. Fawltly Towers & Too Much Attitude: Barriers to Equity in Training. Paper presented to National Conference on Vocational Education & Training. 15-17 February, 1993, Sydney.

Clement-Heist, K., Siegel, S., Gaylord-Ross, R. (1992). Simulated and *InSitu* Vocational Social Skills Training for Youths with Learning Disabilities. Exceptional Children. 58(4), 336-345.

Report on the successful use of a model designed to develop social stalls for youth with learning disabilities.

Disabled Youth: From School to Work, (1993) Centre for Educational Research and Innovation, OECD, Parish, 70p.

This book records and describes various 'accompanying' mechanisms recently developed, mainly transitional arrangements applied on a case by case basis. Studies from OECD countries show concrete examples of implementation while illustrating the specificity of national approaches.

Kokaska, C.J. (1983). Career Education: A Brief Overview. Teaching Exceptional Children. 194-195.

Suggests an approach to career education for exceptional students.

Lewis, D.R., Hearn, J.C. and Zilbert, E.E. (1993). Efficiency and Equity of Vocationally Focused Postsecondary Education, Sociology of Education Vol 66, July, 188-205.

The results of this research suggest that postcompulsory vocational education does have significant effects on individual economic outcomes, but those effects are not found among all who are targeted by the equity rationale. In particular, men from lower socioeconomic backgrounds do not appear to benefit appreciably. The analysis, however, provides striking support for the equity rationale as it applies to women.

Lombard, R. Hazelkorn, M & Neubert, D (1992). A survey of accessibility to secondary vocational education programs and transition services for students with disabilities in Wisconsin. CDEI 15(2), 179-188.

Reports the results of a survey indicating that while students with disabilities were gaining access to vocational education programs, they were often denied access to the full range of programs and services. Also highlighted in the data, an indication that vocational education enhances employment prospects for students with disabilities although males are liable to benefit more than females.

Lyall, K and Hawkins, S (1993) Different Futures: A study of the Critical factors Encouraging Women's Access to Non-traditional Entry-Level Training. A joint DEET/OSTB project managed by Affirmative Action in Training Inc on behalf of the VEETAC Women's Standing Committee, 48p.

A research report in which findings on what women want from work and how women learn about work are documented.

National Audit of Vocational and Careers/Work Education Materials for the National Element of the Country Areas Program for Country Secondary Schools. Department of Employment, Education and Training. 1993. 102pp.

Describes resources available for rural schools but also highlights the fragmented nature of that provision.

Roberts-Yates, C. (1990). Developing a Project to Improve Employability for Secondary Students with Special Education Needs. Australasian Journal of Special Education. 14(1), 38-42.

Provides background on social skills and employability project that was set up in South Australia. Highlights the needs for close cooperation with industry and the identification of training environments in high growth occupations.

Rojewski, J.W. Pollard, R.R. Meers, G.D. (1992). Grading Secondary Vocational Education Students with Disabilities: A National Perspective. Exceptional Children. 59(1), 68-76.

Reports on current practices of vocational educators in grading students with disabilities.

Vautour, J.A., Stocks, C., Kolek, M.M. (1983). Preparing Mildly Handicapped Students for Employment. Teaching Exceptional Children. 54-58.

Describes project worth, a comprehensive set of activities for junior and senior high school handicapped students designed to ensure career awareness as specific training on job related skills.